



TO: ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES & SERVICE CENTERS
ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES REPRESENTATIVES

MODELS AFFECTED: MA-332 SERVICE MANUAL (0300-4225-400)

SERVICE MANUAL CHANGES: Replace manual page 4 which includes
descriptions for IC's #5, 6, and 7.

TECHNICAL SERVICE DEPARTMENT
REGENCY COMMUNICATIONS, INC.

B - Decode

The received audio is applied to Pin 10 of the DCS board where it passes through a buffer/amplifier IC3-A and then through a low-pass filter formed by the Operational Amplifier IC3-B and IC3-C and their associated resistors and capacitors. The low-pass filter rejects all the high frequency noise and provides a clean sub-audible signal to IC3-D for data recovery. IC3-D is a high-gain limiter whose output is inverted through transistor Q1 to provide a 5V p-p data train on Pin 30 of IC1.

IC1 compares the received data against the code stored in IC2 and switches the output on Pin 31 from 0 to 5 volts upon detecting a match. This signal is inverted through IC4-D to switch transistor Q4 OFF and thus unmutes the audio.

IC4 is a quad exclusive OR Gate in which IC4-A is used by IC1 to generate proper control signal for its internal operation and IC4-B, 4-C and 4-D are used as logic inverters.

V - PARTS LIST

LOCATION

DESCRIPTION

RESISTORS (All resistors are 1/4W 5% unless otherwise noted.)

R1	51K
R2	51K
R3	200K
R4	1M
R5	1M
R6	20K 1/8W 1%
R7	10.7K 1/8W 1%
R8	560K
R9	560K
R10	20K 1/8W 1%
R11	32.4K 1/8W 1%
R12	3.3K
R13	1M
R14	1M
R15	10K
R16	10K
R17	100K
R18	100K
R19	10K
R20	100K
R21	8.2K
R22	13K 1/8W 1%
R23	13K 1/8W 1%
R24	24.9K 1/8W 1%
R25	30.1K 1/8W 1%
R26	5.1K
R27	20K
R28	100K
R29	1K
R30	10K Potentiometer Single Turn
R31	51K
R32	100K
R33	not used
R34	51 ohm
R35	51 ohm
R36	1K
R37	1.5K
R38	5.1K
R39	51K
R40	51K
R41	51K

INTEGRATED CIRCUITS

IC1	Custom IC	***MP-2-DCS
IC2	Code Plug (MA-333)	HMCP-1
IC3	Quad Op. Amp	3403
IC4	Quad Exclusive or Gate	***14507/14070
IC5	Dual Op. Amp	MC1458
IC6	5V Regulator	78L05
IC7	5V Regulator	78L08

***CMOS devices requiring special (non-static) handling